NAVAL SURFACE FIRE SUPPORT INITIATIVES

After more than ten years of development and testing, the Navy will soon begin to deliver an extended range, fire support capability for use by the Fleet to support Expeditionary Maneuver Warfare. This emerging capability is best described over the near-, mid-, and long-term.



In the near-term the Navy will make TACTOM Block **IV Tomahawk** missiles available to MAGTF

commanders for strikes against high-payoff, time-sensitive targets. Firing from either surface combatants or submarines, the TACTOM can be ready to fire in approximately 10 minutes, which is considerably shorter than the hours needed for today's Block III Tomahawks.

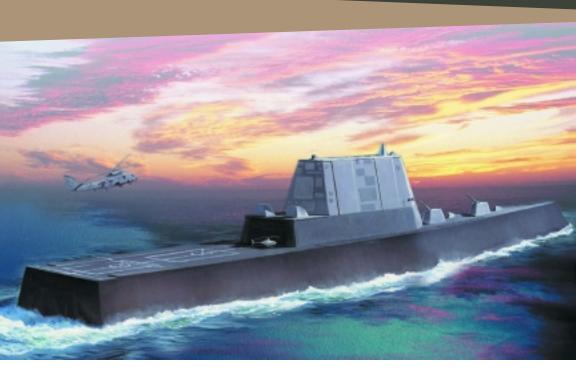
Additionally the Navy Extended Range Munition (ERM) Program anticipates fielding ERM for its 5-inch/62-caliber guns during FY 2008. This munition will permit MAGTF Commanders to engage targets with volumes of fire of GPS-guided precision weapons from surface combatants over-the-horizon.

In the mid-term, DD (X), equipped with two 155-mm Advanced Gun Systems (AGS), 600 round magazine, and land attack missiles will add considerable firepower and flexibility to the Expeditionary Strike Group (ESG) and Expeditionary Strike Force beginning in 2013. The AGS, firing the Long Range Land Attack Projectile (LRLAP), will increase the lethal effects of the MAGTF's Naval Surface Fire Support (NSFS) fires three-fold out to 100 nautical

miles. The DD (X) will also be the first naval ship designed to integrate counterfire detection with its own weapons systems and digitally communicate the information to the Supporting Arms Coordination Center (SACC) for engagement.

Long-term prospects for advancements in NSFS are even more promising. Battlefield commanders will be able to harness the destructive power of directed energy waves or Mach 7+ propelled projec-





tiles using electromagnetic energy produced aboard the Navy's future family of all-electric ships, which includes DD (X) and CG (X). Electromagnetic guns could hurl a 35-pound projectile at extremely high speeds, which translate into highly destructive results in the target area. In addition, free electron lasers have the potential to provide protection against theater ballistic and cruise missile attacks.

During 2004, work began to formally incorporate NSFS into joint doctrine by fast-tracking NSFS into the Joint Capabilities Integration and Development System (JCIDS) process. With continued commitment, the Marine Corps and the rest of the joint community will once again be able to rely upon NSFS as a readily-available, all-weather fire support system during forcible entry operations.